

REMARKS

EXAMINER'S COMMENTS

Response to the Restriction Requirement and Election of Species

Claims 7-13 and 19-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 4, 2006. Applicant argues all the pending claims and species can be easily examined in one application. Applicant has also stated the amended claims should change the groupings of the claims. These arguments are not persuasive.

The compositions disclosed by Applicant can be used in laundry detergents and therefore a search for the compositions will give results traversing different arts. In regards to the election of species, the whitening agents have different structures, properties and mechanisms for whitening therefore one whitening agent is not suitable for all applications. Claims 1-6 and 14-18 will be examined on the merits. It is believed Applicant has withdrawn Claim 14-18 erroneously. The amended claims do not change the grouping of the invention. The requirement is FINAL.

RESPONSE: Applicant still traverses this restriction. When claims are allowed, Applicant requests that this restriction be revisited. None of the amendments or changes in this response is to be construed as a waiver or estoppel of rights of the application as originally filed.

Applicant plans to file subsequent divisional and continuation applications.

APPLICANT'S COMMENTS

Applicant has amended the pending claims to further explain and describe the present invention. The claims further recite that the two active components remain separate until contact on the tooth surface to produce accelerated and improved whitening of the tooth.

Further, the pH of the hypochlorite solution increases the pH of the tooth prior to applying the peroxide solution. The order of addition optimizes the tooth environment during whitening which should be in the pH range of neutral to basic. When the peroxide is applied to the surface of the tooth, a pH gradient is established between the peroxide whitener (which is neutral to low pH) and the hypochlorite (which has a higher pH). Other factors also appear to be involved.

REJECTION OF CLAIM 14 under 35 U.S.C. 102(b)

Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Sagel et al. (US 2001/0053375). The Examiner argues that:

“Sagel et al. disclose delivery systems for tooth whiteners. The compositions may comprise combinations of whitening agents, which include hydrogen peroxide and hypochlorites (paragraph 0040). The compositions may be in the form of liquid, paste, gel or solution, which is applied or coated onto a strip of material (paragraph 0036). The oral care substances may be separated layers of components. The compositions may also comprise a fluoride source as an anti-caries agent. The pH ranges from 4.5 to 11 (paragraph 0076). The reference anticipates the claims insofar as it discloses a kit comprising a hypochlorite solution having a pH of about 8.5 up to 13, and a means for applying the solutions to the surface of the teeth.”

Applicant respectfully traverses this rejection.

Sagel et al. discloses tooth whiteners. However these compositions are combined not kept separate until applied to the tooth as is found in Applicant’s present invention.

Applicant argues that Sagel et al. would lead one of skill in the art away from the present invention not toward it.

Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 21-22 UNDER 35 U.S.C. 102 (b)

Claims 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ambuter et al. (US 5,997,764). The Examiner asserts that:

"Ambuter et al. disclose thickened bleach solutions that may be used in oral care. The compositions comprise hypochlorite including sodium, potassium and calcium hypochlorites (col. 5, lines 1-4). The compositions have pH values above about 10 and are preferred because essentially all of the active chlorine is reported to be in the form of the hypochlorite ion (col. 5, lines 28-32). The hypochlorite is included in the compositions at a concentration of about 5% (col. 12, first table). Rheology stabilizers are incorporated into the compositions at concentrations ranging from preferably 0.005% to 5%. The include methyl salicylate (col. 8, see table), encompassing claim 22. The reference anticipates the instant claims insofar as it discloses a composition comprising sodium hypochlorite having a pH greater than about 8.5 to about 13 and a flavoring agent."

Applicant respectfully traverses this rejection.

Ambuter et al. discloses thickened bleach compositions. However a careful reading of Ambuter et al. indicates that there is not teaching or suggestion to keep components of the these reactive compositions separate until they are applied to the tooth to produce an accelerated whitening as is found in Applicant's present invention.

Applicant argues that Ambuter et al would lead one of skill in the art away from the present invention not toward it.

Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 1-6 AND 14-17 UNDER 35 U.S.C. 103 (a)

Claims 1-6 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howes (US 2002/0098246). The Examiner states that:

"Howes discloses a two-component system wherein one part comprises sodium hypochlorite and the second part comprises hydrogen peroxide (see Abstract). The compositions are mixed before use and may be used for dental plaques (paragraph 0123). The compositions may also comprise pH modifiers (paragraph 0039). The pH of the hypochlorite is not disclosed but hypochlorite is an alkaline compound¹. The reactants, peroxide and hypochlorite anion, may be delivered in whatever physical form is desirable for the user, for example, solutions, gels, solids, semi-solids, pastes, powders, mists and sprays (paragraph 0080). The intended use of the compositions carries no weight in determining patentability because the compositions of the reference are substantially the same, comprising sodium hypochlorite and hydrogen peroxide and may be used orally, as the compositions of the instant claims. Therefore the compositions of the reference may be used to whiten teeth since the compositions of the reference and compositions of the instant claims are substantially the same. The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13.

Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the peroxide and hypochlorite for optimal results, as supported by cited precedent.”

Applicant respectfully traverses this rejection.

Howes discloses compositions methods and apparatuses and systems for singlet oxygen delivery. The Examiner notes correctly that the pH found in Applicant’s claims is not recited in Howe. A careful reading of Howe et al. indicates that there is not teaching or suggestion about WHITENING OF TEETH. The paragraph {0123} noted is NOT to tooth whitening, but instead is to “dental plaques” and read in the context of the reference as a whole would be for the purpose of bacterial control. The components of Applicant’s reactive compositions are kept separate until they are applied to the tooth to produce an accelerated whitening as is found in Applicant’s present invention.

Applicant argues that Howes does not even reach the “obvious-to-try standard and would instead lead one of skill in the art way from the present invention not toward it.

Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 1-4, 6 AND 14-18 UNDER 35 U.S.C. 103 (a)

Claims 1-4, 6 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over van den Bosch (US 6,017,515). The Examiner states that:

“Van den Bosch discloses two part compositions that may be used to bleach teeth. The first component is a liquid component comprising sodium hypochlorite. The second component comprises sodium perborate (col. 2, lines 40-45). The compositions may also include fluoride and flavoring found in toothpastes (col. 4, lines 6-7). The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13.

Normally, changes in result effective variables are not patentable where the difference involved is one of degree, not of kind; experimentation to find workable conditions generally involves the application of no more than routine skill in the art. *In re Aller*, 105 USPQ 233, 235 (CCPA 1955). It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the perborate and hypochlorite for optimal results, as supported by cited precedent.’

Applicant respectfully traverses this rejection.

Van den Bosch discloses compositions and methods for bleaching teeth. The Examiner notes correctly that the pH found in Applicant's claims is not recited. However, a careful reading of Van den Bosch indicates that there is no teaching or suggestion about the importance of keeping the reactive components separate until they are applied substantially at the same time to the tooth to be whitened. When this reference is read as a whole, it does not teach or suggest the present invention. The components of Applicant's reactive compositions are kept separate until they are applied to the tooth to produce an accelerated whitening (beyond that observed for the individual components) as is described in Applicant's present application and invention.

Applicant argues that Van den Bosch does not even reach the "obvious-to-try" standard and would instead lead one of skill in the art way from the present invention not toward it.

Reconsideration and withdrawal of this rejection is respectfully requested.

REJECTION OF CLAIMS 11-6, 14-17 AND 21-22 UNDER 35 U.S.C. 103 (a)

Claims 1-6, 14-17 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (US 2006/0060819). The Examiner states that:

"Jung teaches oral compositions comprising two paste solutions that have decolorizing effects. The first paste comprises hydrogen peroxide and the second paste comprises sodium hypochlorite (see Abstract). Each paste comprises 1% flavoring agent. The flavoring agents include peppermint, spearmint oil, menthol, carbon, anethole and oegenol (paragraph 0054), encompassing claims 21-22. The paste solutions are stored in a dual container. The reference differs from the instant claims insofar as it does not disclose the hypochlorite solution has a pH greater than about 8.5 to about 13."

It would have been obvious to one of ordinary skill in the art to have adjusted the pH of the hypochlorite to the alkaline range disclosed motivated by the desire to optimize the reaction between the peroxide and hypochlorite for optimal results, as supported by cited precedent above."

Applicant respectfully traverses this rejection. Jung discloses compositions and methods for dentrifrices which are effective in decoloring teeth. The Examiner notes correctly that the pH found in Applicant's claims is not recited. However, a careful reading of Jung indicates that there is no teaching or suggestion about the importance of keeping the reactive components separate until they are applied substantially at the same time to the tooth to be whitened. When this reference is read as a whole, it does not teach or suggest the present invention. The components of Applicant's reactive compositions are kept separate until they are applied to the tooth to produce an accelerated whitening (beyond that observed for the individual components) as is described in Applicant's present application and invention.

Applicant argues that Jung does not even reach the "obvious-to-try" standard and would instead lead one of skill in the art way from the present invention not toward it.

Reconsideration and withdrawal of this rejection is respectfully requested.

Additional Prior Art Made of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Access: Special Supplemental Issue "Whiter Teeth, Brighter Smiles" September 1999. The reference discloses a method of whitening teeth applying hydrogen peroxide to the teeth followed by applying a sodium hypochlorite solution (page 8, col. 2).

RESPONSE: This reference does not teach or suggest the present invention.

SUMMARY

Applicant argues that with these amendments, the now pending claims are of a form and scope for allowance.

Prompt notification is hereby requested.

The amendments herein do not constitute an estoppel or waiver of original rights.

Applicant plans to file continuation and divisional U.S. patent applications during the pendency of the present application.

A Petition for extension of time and fee are enclosed.

Applicant authorizes the Commissioner to charge or credit Deposit Account 16-1331 if needed for this response.

Respectfully submitted,

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Enclosures : Petition and fee
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